AMENDMENTS TO THE CLAIMS

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A method of measuring antioxidant status and/or the capacity to moderate oxidative stress in a sample including the step of contacting the sample with at least a fluorescing porphyrin compound.

2. (Original) A method of measuring antioxidant status and/or the capacity to moderate oxidative stress in a sample including the step of contacting the sample with at least afluorescing porphyrin compound under conditions suitable for measuring the antioxidant status and/or the capacity to moderate oxidative stress in the sample.

3. (Presently Amended) A method according to claim 1 wherein the porphyrin compound is selected from the group consisting of ~~comprising~~: uroporphyrin I, uroporphyrin II, uroporphyrin III, ~~and~~ uroporphyrin IV, ~~,~~ coproporphyrin I, coproporphyrin II, coproporphyrin III, ~~and~~ coproporphyrin IV, ~~,~~ MS-tetraphenylporphyrin, ~~,~~ deuteroporphyrin IX, ; hematoporphyrin IX, ; mesoporphyrin, ; protoporphyrin IX, ; and dihydrochloride and methyl ester derivatives of all the above mentioned porphyrins.

4. (Original) A method according to claim 1 wherein the porphyrin compound is of a uroporphyrin structure.

5. (Original) A method according to claim 1 wherein the porphyrin compound is uroporphyrin I dihydrochloride.

6. (Original) A method of measuring antioxidant status and/or the capacity to moderate oxidative stress in a sample, comprising the steps of:

a. contacting the sample with at least a free radical generating substance and afluorescing porphyrin compound; and

b. determining the antioxidant status and/or the capacity to moderate oxidative stress of the sample by measuring the resultant fluorescence of the mixture in step (a), and comparing the fluorescence to a standard.

7. (Presently amended) A method according to claim 6 wherein the free radical generating substance is selected from the groups ~~comprising~~ consisting of: peroxidase/H_2O, horseradishperoxidase/H_2O_2, and amidino-azo-radical initiators ~~" amidino-azo-radical initiators " such as 2,2'-azobis (2-methylpropionamidine) dihydrochloride~~.

8. (Original) A method according to claim 6 wherein the free radical generating substance is 2,2'-azobis (2-methylpropionamidine) dihydrochloride.

9. (Original) A method according to claim 6 wherein in addition to contacting the sample in step (a) with a free radical generating substance and afluorescing porphyrin compound the sample is also contacted with at least a surfactant, emulsifier or solubilizer.

10. (Original) A method according to claim 9 wherein the surfactant is a polyoxyethylene alcohol.

11. (Original) A method according to claim 10 wherein the polyoxyethylene alcohol is a polyoxyethylene ether.

12. (Presently Amended) A method according to claim 1 ~~or claim 6~~ wherein degradation of the porphyrin compound is measured by spectrofluorometer.

13. (Presently Amended) A kit for determining the antioxidant status and/or the capacity to moderate oxidative stress of a sample, comprising a free radical generating substance, a fluorescing porphyrin compound and instructions for their use in accordance with the method as claimed in claim 1 ~~or claim 6~~.

14. (New) A method according to claim 6 wherein degradation of the porphyrin compound is measured by spectrofluorometer.

15. (New) A kit for determining the antioxidant status and/or the capacity to moderate oxidative stress of a sample, comprising a free radical generating substance, a fluorescing porphyrin compound and instructions for their use in accordance with the method as claimed in claim 6.